

SEQUENCE LISTING

<110> PREUSS, DAPHNE
COPENHAVER, GREGORY
KEITH, KEVIN

<120> CHROMOSOME COMPOSITIONS AND METHODS

<130> ARCD:309PZ6

<140> UNKNOWN

<141> 1999-12-10

<160> 179

<170> PatentIn Ver. 2.0

<210> 1

<211> 1038

<212> DNA

<213> Arabidopsis thaliana

<400> 1

```

tgactatgtg atattggttca aattacctat aactactctc tcaaataaga gatcaattgc 60
agtttttttag gatcgaattc acggagttct tttgttcaaa cagtgaagta aatgtcgaga 120
ttaagctagc aggatatgat tgaaaataaa agagaacaaa gtaagaaaac agcagattga 180
ttttgttgta aacgattttaa taaagagcta ggaacagggg attctcacga aactattggg 240
tagtagatct aatgaaaagct aggttgtgat caaactattc ttaaactcaa actctaatta 300
tggaacaaca ggtaggcgtg ccgcgaaact ccctatatct atagctaata ataaccggag 360
aagccgagaa actatcaacc taaatatgca ttcttaacga gttcaattgt tcatcttact 420
agataggccg attcttatta cacacctata aaccagactc atcaaataat agatccaatt 480
acagatacct atgatgggca tatctagtgt ctggattcaa gatctagtta attactctag 540
atctagcatt aagcatagat gaagaactct acagataacc tagcagaggg ggcaatctac 600
taaaccatat gaatccctaa tgaaaaaccc tattcctaac aagcagatta ctacagacata 660
ttggatggag caaacaacat aattgacctt agcttttgct ccaaaatgtc tccttatctc 720
cattgttgtc ccattgcata aaataacctga aaagacacca aaaagactcg agagataaca 780
taacgactca aaatcctata cctaaaacat ggatacaatc agtaaaaatc gggttatata 840
aactccccga gacttagctt ttgcttcccc tcaaacaaaa cacaaaagca aaaccggtgg 900
aagaggtttt gaaaacaaaag gaactcccaa cattctctag cctattgcca tgatcatcca 960
aactaagtcc atatgcctaa caagtctaata caaatcctaa ccaacatgta cttctctgat 1020
tgatttttcc agttctttt                                     1038

```

<210> 2

<211> 601

<212> DNA

<213> Arabidopsis thaliana

<400> 2

```

tgatatgggt caaattacct ataactactc tctcaaataa gagatcaatt gcagtttttt 60
aggatcgaat tcacggaggt cttttgttca aacagtgaat taaatgtcga gattaagcta 120
gcaggatatg attgaaaata aaagagaaca aagtaagaaa acagcagatt gattttgttg 180
taaagcattt aataaaagagc taggaacagg gtattctcac gaaactattg gttagtagat 240
ctaataaaag ctaggttgtg atcaaactat tcttaaaact aaactctaata tatggaacaa 300
caggtaggcg tgccgcgaaa ctccctatat ctatagctaa taataaccgg agaagccgag 360
aaactatcaa cctaaatatg cattcttaac gagttcaatt gttcatctta ctagataggc 420
cgattcttat tacacaccta taaaccagac tcatcaaata atagatccaa ttacagatac 480
ctatgatggg catatctagt gtctggattc aagatctagt taattactct agatctagca 540

```

ttaagcatag atgaagaact ctacagataa cctagcagag ggggcaatct actaaaccat 600
a 601

<210> 3
<211> 885
<212> DNA
<213> Arabidopsis thaliana

<400> 3
tttttttgtc cacacaatga gttgaatgtc aagattaagc tagtagagat tgattgtaat 60
aagaagtaaa caaagtaaaa agacaacgga ttgattgggt gtaaacgata aaataaagag 120
gtaggaacaa ggtattctca ggagactatt ggtagtaga tctaataaaa gctaggttgt 180
tatcgaacca ttattaaaca caaattttta ttatggaata accggtggtg ttctgcaaaa 240
cttttgtgcc tatagctaag aataaccgca gaagccgaga gatctttaac ctaaaccatgc 300
attctaaacg agttcaattg ttcaccttag tatataggcc gattcttatt acacacctat 360
aaaccagact catcaaataa tagatccaac tacatatacc tatgggtgggt atatctagt 420
tctggattca agatctagtt aattactcta gatctagcat taagattaat tctacacata 480
atthagcaag ggggtgatct actaaacat atgaatccct aatgaaaaac tcaattccta 540
acaagaaact actcagacag attgattgaa acaacaaca taaatgaata agaaagcata 600
aacacaacaa ataaaattag ggaatgaaag gatctcttca ctgtaatgag aactgaatga 660
atctctgaag aacaacggat gattagctta tgtctctctg aaaataggga ttaaaaaact 720
gataaaagga acttaggtct aaacaatgac ctttaaaact atataaaac cctataaaac 780
gtccagggac taataatgca aatagggaag tcttttgggg caaatttcca cttttgtaaa 840
cttgaaagcg tattggactt ttctgggccg aaactggtgt cgatc 885

<210> 4
<211> 1072
<212> DNA
<213> Arabidopsis thaliana

<400> 4
tatcttgata tgggtcaaat taccctaaga actactctct caaataagag atccattgcg 60
gtatttaagg atcgaattcc acaaagttct tttcttcaaa caataagttc aatgtcaaga 120
ttaagctaga agggatatgat cgaaataata agaaaaacaa ggaagaaaac agtagattgt 180
ttcgttgtaa acgattaaat aaaaagctag gaacagggtg ttctcatgaa actattgggt 240
agtagatcta atgaaagcta ggttggtatc gaaccattct taaactcaaa ctctaattat 300
ggaataactg gtggtgttcc gcaaaaactcc ctataattat agctaagaat aaccggagaa 360
ttcgagagat tattaacct aatatgcatt cttaacgagt tcgattgttc accttagtag 420
ataggccaat tttattaca cacctataaa ccaggctcat caaataatag atccaactac 480
agatacctat ggtggacata tctattgtct ggattcaaga tctagttaat tactctagat 540
ctagcattaa gcataatcaa agatgaagaa ttctacagat aacctagcaa aggggaaaaa 600
ttactaaacc atatgaatcc ctagtgaaga accctattcc taacaagcag attactcaga 660
catattgatt gaagcgaaca acataattgt gtagaaagg tccaaaatcg tccttagctt 720
ccttttctct acctcttgtc cgaaatgtct cctcatctcc attgttgtcc cgttgcatag 780
aatacctgaa aagacactac aaagactcga gaaataacat aaagactcaa aatccattac 840
caaacacata gataaaatcg gtgaaaatag gatatatcaa ctccccaaga cttagctttt 900
gcttgccctc aagcaaaaaca caaaagtcga acccggtgaa gagattttga aaacaaagga 960
actcccaaca ttctctagac tattgcatg atcatccaaa ctaaattccac atgcctagca 1020
agtctaataa aatcctaacc aacatgtact tctctaccca agctttgtaa tt 1072

<210> 5
<211> 591
<212> DNA
<213> Arabidopsis thaliana

<400> 5
tgatattggt caaattaccc taagaactac tctctcaaat aagagatcca ttgcgggtatt 60
taaggatcga attccacaaa gttcttttct tcaacaata agttcaatgt caagattaag 120
ctagaagggt atgatcgaaa taataagaaa acaaaggaag aaacagtag attgtttcgt 180
tgtaaacgat taaataaaaa gctaggaaca gggtagttct atgaaactat tggtagtag 240
atctaataga agctagggtg ttatcgaacc attcttaaac tcaaaactcta attatggaat 300

aactggtggt gttccgcaaa actccctata attatagcta agaataaccg gagaattcga 360
gagattatta acctaaatat gcattcttaa cgagttcgat tgttcacctt agtagatagg 420
ccaattttta ttacacacct ataaaccagg ctcatcaaat aatagatcca actacagata 480
cctatggtgg acatatctat tgtctggatt caagatctag ttaattactc tagatctagc 540
attaagcata atcaaagatg aagaattcta cagataacct agcaaagggg a 591

<210> 6

<211> 650

<212> DNA

<213> Arabidopsis thaliana

<400> 6

taagaactat tatctcaaat atttaaggat cgaatttcac aaagtttttt tgttcacaca 60
atgaattaaa tatcgagatt aagctagtag ggaatgattg aaaataaagg agaacaaagt 120
aaaaagacag cagattaatt ggttgtaaac gattaaataa agagtttagga acatgggtatt 180
ctcaggaaac tattgggttag tagatctaatt gaaagctagg ttgttatcga accattctta 240
aactcaaaact ctaattatgc aataaccggt ggtgttccgc caaactccct atgcttatag 300
ctaagaataa ccggagaagc cgagagatct ttaacctaaa catgcattct aaacgagttc 360
aattgttcac cttactagat agaccgattc ttattacaca cctataaacc aggttaatac 420
aataataaat ccaattacag atacctatgg tgggcataatc tattgtctgg cttcaagatc 480
tagttaattt ctgtagatct accattaagt ataatacaag atgaagaatt ctacagataa 540
cctagaaaag gaggcaatat actaaacct atgaatcccc aatgagaaac cctattccta 600
acaagcaaac tactcagaca tattgaatga aacaaacaac ataattgagt 650

<210> 7

<211> 856

<212> DNA

<213> Arabidopsis thaliana

<400> 7

taaatatgca tttttaatga gttcgtttgt tcaccttagt agataggccg attcttatta 60
cacacctaata aaccagactc atcaaataat agatccaact acatatactt atggtgggca 120
tatctattgt ctggattcaa gatctagtag gttactctag atctagcatt aagcataatt 180
aaagatgaag aattctacag ataacctagc aaagggggca atctactaaa ctatatgaat 240
ccctaattgag aaacctatt cctaacaagc agattactca gacatattga ttgaaggaaa 300
caacataatt gagtatgaaa acataaacac ggcaaataga tttaagggaa agaagggatc 360
tcttactgt attaggaact gaatcaatct ctgaaaacac tcgatgaata gcttatgtct 420
ctcagtaaca gggtttgcaa aaagcttgat aaaaaacttg ataatagaaa cttagggtcta 480
aacaatgtat atacaccctc taaaaacgct tagggactaa taatgtaaat agaaaagttt 540
tctagggcaa atttctctct ctgtaaactt gaaagcgtct aggactttgc tggggcgaaa 600
ctggtgtcga tcgacactag gagtgtgtcg atcgacactc ctcttgattc gtgaaaccaa 660
agtcgtcctt accttacttt ttcttagctt ttgtctccaa atgtctcctt atctccattg 720
ttgtcccact gcatagaata cctgaaaaga cactaaaaag actcgagaaa taacataaag 780
actcaagatc ctatacctaa aacatagata aaatcagtta aaataaggat atatcaatca 840
ccacaatcta catatt 856

<210> 8

<211> 736

<212> DNA

<213> Arabidopsis thaliana

<400> 8

aactatgatt ttagagtaac cgatggcggt cgcgaaact ccctatgctt atagctaaga 60
ataaccggag aagccgagag atctttaact taaacatgca ttattatcaa atttgattag 120
ttcacctagt atctaaacca gagcccttat atgagcctac ctgttctttc ttaaagtcc 180
aggctcatct atgatatgac aaatagcaaa tacctatggt gggcatacct attatcta 240
atcaagttct agttagctac tctagaacta ccaataagaa caattaagat gaagaatcat 300
atagataacc tagcaagggg caatctacta aatcatctaa atctctaag agaaacccta 360
aacctaacaa gtggattact aagacatgat caaagaaaca caaatcatat tctgaataag 420
aaataaatga tgaaaataac aagagaaaag agtaagaaag atccaaaagg gagttttcac 480
aggtttttgc tctccaaagt acaaaaagaga tccagggaat agcctcccaa agcttacggg 540

ataaccggag aagccgagaa atccgatgct aaagcatgca ttgttaataa gcttgattag 540
 ttcacctagt atctaaacca gagcccttct atgagcctac ctgttctttc ttaaagtgtct 600
 aggctcatct atgatgggtc aaataacaaa tacctatggc ggaataacct attatctaatt 660
 ataaagttct aggtgatcaa tctaaaacta gctataagaa taatcaagat gaagaactct 720
 aagaataatc ctaaggggtt ttcgatctac taatccatct aaatccctat tgagactccc 780
 tagacccaac aaggtgatta ct 802

<210> 15
 <211> 821
 <212> DNA
 <213> Arabidopsis thaliana

<400> 15
 acaaagtctt aatagtacct gtttttaata taatagagaa gattttataa aaacgatgga 60
 aacaagtctg gtattgatgt tttccgttct catcaacaac ttcacctatt tcagctcgtt 120
 gcattcgttc aaggaattga gtcctgaaac agtagcaaaa aaagaaggaa ataaatagcc 180
 aagaataaaa ttatttataa taaactaaac agttaagaga taatgaaaat ataaacgttc 240
 ttacgtgatg cgatccatgt taatctctgg gtaactttta ttgaatgtaa ttcttgaagc 300
 accattatgt gtgattagac attgacgacc taaaatattt atgtttttat tataatgcatt 360
 agctataaaa aaaacatatg atgagaagag agttaaatat accttcatga tcagcaacgt 420
 tccaaaatcg aagcacgcat gttataggat tcataccgaa ggtccactga taaccaagggt 480
 gtgaccaag ttccctccac aaacgcacaa acaaatcaca agtatatcca cttgcaacac 540
 atgtaagagt ttttccctta ataagaatat ctttaattatt tctctctaac atctaagttc 600
 tataaattaa gccacctata aagataacaa tgcttactat gtttctacat taaaatatat 660
 aacaaaaaat atgtcgaact atatagtcgg aaataactaac caagtatttt taagctcaaa 720
 ctcgagaaat tgagaaagtc gaggttttcg gaatattgag gaacataatc tggctctgtt 780
 atattcccaa ctgcgcagac aacaccataa gcatctacaa a 821

<210> 16
 <211> 672
 <212> DNA
 <213> Arabidopsis thaliana

<400> 16
 cctcccaagt gagcttggtt aaagtcatta gcttgactcc tttaatcatc aagaagctcc 60
 tggagatgaa ccgatggcac ctctggaagg atttggtctg ctaagtattt cttgagcctt 120
 tgaccattta ctgtaaaatc tccactctta ccagctagag tgactgctcc ataaggacgg 180
 acctcagtga tgtagaaggg gccagaccat ctggatttaa gttttcctgg aaagagtttc 240
 aagcgagagt tgaatagcag cacctgatca ccaaccttga aatccttaat gatgatcttc 300
 ttgtcatgga aaagcttggt tctctccttg tagatttttag aactctcata agcttctaga 360
 cggtatctcat cgagggttact tagttggatc aatcgcttct cctcagcagt ttttatgtca 420
 aagttaaaaa gttttaccgc caacattgct ttgtactcga gctcaacggg tagatgacat 480
 gattttccat agagaagatt gaaaggagtt gtacctatgg gggctctgaa ggctgtcctg 540
 taagcccata atgcatcatc tagctttaca gaccagtctt tccttgtaat cccaacagtc 600
 ttttctagaa ttgtttttat ctccctattg gagatctcaa cctgcccgtt tgtctgtgga 660
 tctatgacca gt 672

<210> 17
 <211> 2954
 <212> DNA
 <213> Arabidopsis thaliana

<400> 17
 taacatgaaa atattatctc atgtatctta taatacaaac tttctgcaat cttcttaaga 60
 acatggctaa atagcaaaca tcgctattta ttggtgaatt taaaaaaca agagtcactg 120
 attacataag aacattcggg gttggatggc agctttcgca cttgtaagac tcaagtagta 180
 cgttcttctg gagaaaaggc attgaacgtt tcgatagcgt actcttttag tgccctcgc 240
 atcctctctt cgtctagttt agcacaatag tccatagcgt taactgaatg tagctcaagt 300
 aagatcacac aagcaattcc aacaaggctt gaaaatcaca cgtgaaatat atatgtcaca 360
 cagtcaataa tgaaatactt atcgaaacaa gataatgaaa gacaaccata cctaacgacg 420
 aacaattaaa ctgtaagttg ggtctactca ttgtcataag atcagcctc tatgttagca 480

```

ttcttcggtt tacaccatgc ttttgaataa ggtacaagag catgatttta tgtgttctat 540
gtacttcgcc aactgctcgt ctttcaacac ttcactcttg cagtctaata caatgatttt 600
ctatttcacg aaatcgatga caagcccaac ccaatgctgc ctctcaacct gcattgggca 660
gtagatgaca tcaacctcat caaaccattt tggctgcacc atggatggga ctcttgtaag 720
cgtgggtgaag taaaaaactc tcttacctga agctgcacaa aatttggtgt attggcgtcg 780
tagctctgac aagaaacttg atggtagaaa atcaaaatgc agcggcttct ttttatcccg 840
ccgcatctga atgaacctca ctaaaagatc tggctcttgt ggaagtcact ttttttatta 900
gcacacacct ttaatactta gttttctact aaaaaagcag tgagcacaca gttttatttg 960
aaacaacaca gattgcatgt ataacttact acttcatcta gaagtgtttg cgctcgtaa 1020
atagttagaa attcagtatt ctccattaca acgccatcag cctgaaaata agatctacat 1080
ggtaccatat accagcaagt tagttgcgaa agcaaataag ttcttctgaa aatatagggg 1140
ctataaatac ttacactctc cgttctatct gtttaagaaa acatttcaact ctctctgcac 1200
ttggaacagc gaatcgggtca tatggaccaa tgggtgggga tttggaggta tcttctcccc 1260
ttttcctggc ctaacaacat gaactttagt cgacctcta acaggtgttt gtgcgtgctg 1320
taccggaatg gtaggcccgc tctctcttct ggtgtacatg acaggactgt ccctaattcg 1380
gtcgtctgac cgcaacacta tgacttttgt ggggaatgtc ttcttcttac ctcttgagg 1440
taacctgctg atgtcagcaa caatttcttg cgttaggcca acaaaacggt tggggcaata 1500
acatcacaa catcttccaa gttcttttct gcatcaatat cctgcataca tatacccatg 1560
tacatagttt agcatatata catcatttac ctatagttta acatctttgt catggcttac 1620
cgggttggtt gcatgcaatt ctctcttggt tctaactctgt aatattcaat tagagaaagt 1680
aagtgggttt cattcaaaaa atataagtgc tagtggatta aatatacaga cgggatagat 1740
aataccttac tgcttgacac ctgctccttc ttttagctc ttttaggtgg ccgggtagat 1800
tgggcgtcca tatcagaaat ggattttttt ctccgtcctt tttgagaagc agcgtcacct 1860
cagacctagt agtacatcac atttctatgt catatttact cattaaaaca aatgagtaac 1920
agtctttacc gtatgctaac ctcttaaga gatactcttg ctgccatctg acacacttaa 1980
tccatcagtt atgccacaaa caccgcttac actgtcactt cctccaggta gccaaatata 2040
aagttcatcc ggctgggaac caacatgctg atgccttggtc tggtcagagc ttctatgttc 2100
ctatttcag aattgcaatt gtaacataag tatattatgt cacttaaaat ggaatggaac 2160
ataaatgttc agttttctaa gacatataca acaaatacag gtaacttaac cttttagtag 2220
catgactctg ctacacattt gttgcattcc cttttttgag catgttgtat attttgcca 2280
cttaccagtt ccctaacaga ttcagcaatc attgccacca attctttctt atgcttatct 2340
agttgagcat caaagtatgc cttcaagtca actgtgttcg cctgttgaat cttgagaaaa 2400
cgtttttcaa attcatcagc tgctcttttg atcaatgcac tactactatg ttgcctttcc 2460
ccagcaatcg ggacatcatg ctgcaaatct tctctagcct aaaaactgtc atcatttttt 2520
tgtgttgtc catcatcaac aggaacatca acacccatgc cgtcttcaca tacaccggtt 2580
gcacctctt gtctctcttc tgcagcacca ccatggacat cagcctccat ctcatcttca 2640
ccatcaatct tagacgaatt cacaccatca tctgcaagaa ctcatcatca gatggttgta 2700
caatatcaca agcgtccatg ccaccactcc aactgttatg ctctgtatggg tgctctctta 2760
ttattaaaga tagcaggtgt gatacttctt catctctctc ctcatcagat aaagataagt 2820
cgatatcttt tgcaagtagt ttttcattca gcagtgatgt gaccagtc tacaataata 2880
agttgaattg gatagttaa gcatgcacat acaattttta taccaaaatc aagtagctga 2940
catacaatat aaag
2954

```

<210> 18
 <211> 1129
 <212> DNA
 <213> *Arabidopsis thaliana*

```

<400> 18
catgcgggaa cccttgtagt gctcttgtag cttggggaag ttccttggtt gttctttggt 60
ttgcgttctt aattgtagaa agaaacgagg ttctgcccac ggatatttaa gaaatgcaac 120
aacatcttta accatctcta catgttcagg attaagattg ttcccgcaca tgtcaggcaa 180
agaattccat caactattag aagcaaggct aggcgaaacc gggttagcgg gtctttgtat 240
ttcttcccca tagaaagctt tctacaatc cattttgaag ttgactttct ctctttacca 300
aatagtgact tgtagaagct tgtaggattc tgaaccgctt tcacattccc tctagttctt 360
gcctcttctt tgttgaagtc agctttgctg aagtttaagac cagttaccag ctcaaaatca 420
tcaatgcaaa agtgaattgg tgtccaaca aacaaccacc gcattcataa cttcttattt 480
gtcaccaact gtctagatag aatgtaatgc aagaacatta cagaaaatcg atgggttccc 540
atttgcaaga tacttcgaaa tttggaacca tccaaattct gcaaaatgct cttcatctag 600
tgcagccttt ataattctca tccacctaa tgtaaagtaa ttgtttatcc tcttctgacc 660
ttcgggttca gaacaaagcc gaaagaaacg ctttgtcaac tcatcatccc ccatttaaca 720

```

[illegible]

```
<400> 21
taacagaaat aagtataact ataactatac ttttatgtaa tcgttgcaaa ctttgatagg 60
agtttgtttg gagtttcttt atgtcatatt tgtaaaacttt gttaggagtt taacaaaaaag 120
taagatagag aaaaatccaa cggaataca ataattaaat aggttcaaaa cataagcaaa 180
```


<223> Description of Artificial Sequence: Synthetic
Primer

<400> 24
gggtctgggtt agccgtgaag 20

<210> 25
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 25
gttttactta gtccaatggt ag 22

<210> 26
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 26
aatggccaa cgatcagaag aatag 25

<210> 27
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 27
gaagtcggc atgttatcac ccaag 25

<210> 28
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 28
caagtcgcaa acgaaaatg 20

<210> 29
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

Primer

<400> 29
aaactacgcc taaccactat tctc 24

<210> 30
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 30
gaagtacagc ggctcaaaaa gaag 24

<210> 31
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 31
ttgctgcat gtaataccta agtg 24

<210> 32
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 32
gttgacttgt atttgatttc tttttc 26

<210> 33
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 33
cgagtgattt ccttttgcta cc 22

<210> 34
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 34	
aagataaagc agcgaatgtg tc	22
<210> 35	
<211> 24	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 35	
cgaaagccgt aactagataa taag	24
<210> 36	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 36	
taccagcata caggagaacg	20
<210> 37	
<211> 22	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 37	
cctgattgca gttttattta cc	22
<210> 38	
<211> 21	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 38	
tccataccta agttccacaa c	21
<210> 39	
<211> 19	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	

<400> 39
 aggggcgagt aaatcaatc 19

 <210> 40
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 40
 gaagtgcgga tctgtttgaa g 21

 <210> 41
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 41
 ataaaaagcc ggagatgggtt g 21

 <210> 42
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 42
 attcatgagt gcaaagggtg gag 23

 <210> 43
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 43
 ctcagccaaa gaatcaagta gag 23

 <210> 44
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 49	
gaatctttgc aaacgagtgg	20
<210> 50	
<211> 21	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 50	
gcggtgatg atctccacct c	21
<210> 51	
<211> 22	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 51	
ttaccccgca ggaaaaagta tg	22
<210> 52	
<211> 21	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 52	
acttcatcac ttgcgggact g	21
<210> 53	
<211> 21	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 53	
ggccaagaa gccacaaca c	21
<210> 54	
<211> 19	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	

<400> 54 accgcaagtg tggctgttc	19
<210> 55 <211> 27 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Primer	
<400> 55 ctattctaga agattgtag gagttac	27
<210> 56 <211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Primer	
<400> 56 atgcctatatt agccttttta tag	23
<210> 57 <211> 20 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Primer	
<400> 57 cgtctgtatg gattcgtagc	20
<210> 58 <211> 23 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Primer	
<400> 58 tgagaggtgc aaaatcataa cag	23
<210> 59 <211> 16 <212> DNA <213> Artificial Sequence	
<220> <223> Description of Artificial Sequence: Synthetic Primer	

<400> 59
accgcgtcgt tggagc 16

<210> 60
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 60
ggccgcgtaa gaggagac 18

<210> 61
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 61
aaactgatat tgtagatgtg tattcg 26

<210> 62
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 62
cgttcgaagc gtttgttc 18

<210> 63
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 63
attacagttt tgcctagaag atgg 24

<210> 64
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 69	
aagttatgca aaatggtatg acg	23
<210> 70	
<211> 26	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 70	
gagcccttct atgagcctac ctgttc	26
<210> 71	
<211> 30	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 71	
agagatcccc tggtactaaa gcctattctg	30
<210> 72	
<211> 21	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 72	
atatttcgtc gatcgtgttt g	21
<210> 73	
<211> 18	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 73	
gtgcctcagg gacttcac	18
<210> 74	
<211> 20	
<212> DNA	
<213> Artificial Sequence	
<220>	
<223> Description of Artificial Sequence: Synthetic Primer	
<400> 74	

20

<213> Artificial Sequence

<223> Description of Artificial Sequence: Synthetic
Primer

22

<213> Artificial Sequence

<223> Description of Artificial Sequence: Synthetic
Primer

25

<213> Artificial Sequence

<223> Description of Artificial Sequence: Synthetic
Primer

22

<213> Artificial Sequence

<223> Description of Artificial Sequence: Synthetic
Primer

24

<213> Artificial Sequence

<223> Description of Artificial Sequence: Synthetic
Primer

21

<210> 80
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 80
 ttgtttttct aggttttggt gtaag 25

 <210> 81
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 81
 atgctgcat gtttgtaagg 20

 <210> 82
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 82
 agtcgatgtc taggctcttc 20

 <210> 83
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 83
 cttccatttc ttgatttagt tc 22

 <210> 84
 <211> 25
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 84
 actaaggcct gtgttgatgt ttctc 25

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 95
 cgttgacccc gagaagatta c 21

 <210> 96
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 96
 ttcggaatc atggtctaca ag 22

 <210> 97
 <211> 24
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 97
 tgtcacatac acggtttctc ttag 24

 <210> 98
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 98
 caagcttcacat ggggactag 19

 <210> 99
 <211> 23
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 99
 taatacggga caatctacaa cac 23

 <210> 100
 <211> 22
 <212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 100

ctaattgtaa cggagaagag ag

22

<210> 101

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 101

aagcatgtta cgtgggattg

20

<210> 102

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 102

caaagtatgt ctggtctatc ttc

23

<210> 103

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 103

aatttaaaag gaatcagaga actac

25

<210> 104

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 104

atgatcaaag ggggacgagg

20

<210> 105

<211> 24

<212> DNA

<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 110
 cgtattcccc tgaaaagtga cctg 24

<210> 111
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 111
 acatccggcc ttcccattg 19

<210> 112
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 112
 attcttttgc tttatgggac ttc 23

<210> 113
 <211> 22
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 113
 aaacatgctg cagcttgatt ag 22

<210> 114
 <211> 23
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 114
 aggacgatga tacgcttgat gag 23

<210> 115
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
Primer

<400> 115
atcatgggga cgctgctttt c 21

<210> 116
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 116
ttggttttaa ggctttggtg tagg 24

<210> 117
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 117
atgcgacagaa gagacgatga tag 23

<210> 118
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 118
gtttaaattt ttatgtcatg tctgtttc 28

<210> 119
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 119
ctttgggcga tgtaggagta g 21

<210> 120
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic

Primer

<400> 120
cgcgacctta gccttggtgt g 21

<210> 121
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 121
tgtgggcagg gtaatggatg 20

<210> 122
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 122
atatccggct ccgaacttgt gg 22

<210> 123
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 123
ccgcgagatg gatgtgatga c 21

<210> 124
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 124
tgagggggct gacatttctt c 21

<210> 125
<211> 19
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

19

```
<220>
<223> Description of Artificial Sequence: Synthetic
Primer
```

21

```
<220>
<223> Description of Artificial Sequence: Synthetic
      Primer
```

22

```
<220>
<223> Description of Artificial Sequence: Synthetic
      Primer
```

18

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

18

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

24

<210> 146
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 146
 gcgaattcct tgccactaag 20

 <210> 147
 <211> 26
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 147
 aagaagaaga ggaggaagaa gatgtc 26

 <210> 148
 <211> 22
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 148
 agtggacgcc ttcttcaatg tg 22

 <210> 149
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 149
 tggtcgctcg tagggcaac 19

 <210> 150
 <211> 21
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

 <400> 150
 cttcacgctg ccttcactct c 21

 <210> 151

Sequence

<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 151
gatacgctcg ttcccactcg 20

<210> 152
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 152
caaaaccaa tccgcgaaga ac 22

<210> 153
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 153
agtggccagc cttcttaaca tacc 24

<210> 154
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 154
tttgtcaat ttattagggt ag 22

<210> 155
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
Primer

<400> 155
atttcagaa gttgaagttg gtc 23

<210> 156
<211> 24

1. *Chlorophyll a* (Chl *a*)
 2. *Chlorophyll b* (Chl *b*)
 3. *Chlorophyll c* (Chl *c*)
 4. *Chlorophyll d* (Chl *d*)
 5. *Chlorophyll e* (Chl *e*)
 6. *Chlorophyll f* (Chl *f*)
 7. *Chlorophyll g* (Chl *g*)
 8. *Chlorophyll h* (Chl *h*)
 9. *Chlorophyll i* (Chl *i*)
 10. *Chlorophyll j* (Chl *j*)
 11. *Chlorophyll k* (Chl *k*)
 12. *Chlorophyll l* (Chl *l*)
 13. *Chlorophyll m* (Chl *m*)
 14. *Chlorophyll n* (Chl *n*)
 15. *Chlorophyll o* (Chl *o*)
 16. *Chlorophyll p* (Chl *p*)
 17. *Chlorophyll q* (Chl *q*)
 18. *Chlorophyll r* (Chl *r*)
 19. *Chlorophyll s* (Chl *s*)
 20. *Chlorophyll t* (Chl *t*)
 21. *Chlorophyll u* (Chl *u*)
 22. *Chlorophyll v* (Chl *v*)
 23. *Chlorophyll w* (Chl *w*)
 24. *Chlorophyll x* (Chl *x*)
 25. *Chlorophyll y* (Chl *y*)
 26. *Chlorophyll z* (Chl *z*)
 27. *Chlorophyll aa* (Chl *aa*)
 28. *Chlorophyll ab* (Chl *ab*)
 29. *Chlorophyll ac* (Chl *ac*)
 30. *Chlorophyll ad* (Chl *ad*)
 31. *Chlorophyll ae* (Chl *ae*)
 32. *Chlorophyll af* (Chl *af*)
 33. *Chlorophyll ag* (Chl *ag*)
 34. *Chlorophyll ah* (Chl *ah*)
 35. *Chlorophyll ai* (Chl *ai*)
 36. *Chlorophyll aj* (Chl *aj*)
 37. *Chlorophyll ak* (Chl *ak*)
 38. *Chlorophyll al* (Chl *al*)
 39. *Chlorophyll am* (Chl *am*)
 40. *Chlorophyll an* (Chl *an*)
 41. *Chlorophyll ao* (Chl *ao*)
 42. *Chlorophyll ap* (Chl *ap*)
 43. *Chlorophyll aq* (Chl *aq*)
 44. *Chlorophyll ar* (Chl *ar*)
 45. *Chlorophyll as* (Chl *as*)
 46. *Chlorophyll at* (Chl *at*)
 47. *Chlorophyll au* (Chl *au*)
 48. *Chlorophyll av* (Chl *av*)
 49. *Chlorophyll aw* (Chl *aw*)
 50. *Chlorophyll ax* (Chl *ax*)
 51. *Chlorophyll ay* (Chl *ay*)
 52. *Chlorophyll az* (Chl *az*)
 53. *Chlorophyll ba* (Chl *ba*)
 54. *Chlorophyll bb* (Chl *bb*)
 55. *Chlorophyll bc* (Chl *bc*)
 56. *Chlorophyll bd* (Chl *bd*)
 57. *Chlorophyll be* (Chl *be*)
 58. *Chlorophyll bf* (Chl *bf*)
 59. *Chlorophyll bg* (Chl *bg*)
 60. *Chlorophyll bh* (Chl *bh*)
 61. *Chlorophyll bi* (Chl *bi*)
 62. *Chlorophyll bj* (Chl *bj*)
 63. *Chlorophyll bk* (Chl *bk*)
 64. *Chlorophyll bl* (Chl *bl*)
 65. *Chlorophyll bm* (Chl *bm*)
 66. *Chlorophyll bn* (Chl *bn*)
 67. *Chlorophyll bo* (Chl *bo*)
 68. *Chlorophyll bp* (Chl *bp*)
 69. *Chlorophyll bq* (Chl *bq*)
 70. *Chlorophyll br* (Chl *br*)
 71. *Chlorophyll bs* (Chl *bs*)
 72. *Chlorophyll bt* (Chl *bt*)
 73. *Chlorophyll bu* (Chl *bu*)
 74. *Chlorophyll bv* (Chl *bv*)
 75. *Chlorophyll bw* (Chl *bw*)
 76. *Chlorophyll bx* (Chl *bx*)
 77. *Chlorophyll by* (Chl *by*)
 78. *Chlorophyll bz* (Chl *bz*)
 79. *Chlorophyll ca* (Chl *ca*)
 80. *Chlorophyll cb* (Chl *cb*)
 81. *Chlorophyll cc* (Chl *cc*)
 82. *Chlorophyll cd* (Chl *cd*)
 83. *Chlorophyll ce* (Chl *ce*)
 84. *Chlorophyll cf* (Chl *cf*)
 85. *Chlorophyll cg* (Chl *cg*)
 86. *Chlorophyll ch* (Chl *ch*)
 87. *Chlorophyll ci* (Chl *ci*)
 88. *Chlorophyll cj* (Chl *cj*)
 89. *Chlorophyll ck* (Chl *ck*)
 90. *Chlorophyll cl* (Chl *cl*)
 91. *Chlorophyll cm* (Chl *cm*)
 92. *Chlorophyll cn* (Chl *cn*)
 93. *Chlorophyll co* (Chl *co*)
 94. *Chlorophyll cp* (Chl *cp*)
 95. *Chlorophyll cq* (Chl *cq*)
 96. *Chlorophyll cr* (Chl *cr*)
 97. *Chlorophyll cs* (Chl *cs*)
 98. *Chlorophyll ct* (Chl *ct*)
 99. *Chlorophyll cu* (Chl *cu*)
 100. *Chlorophyll cv* (Chl *cv*)
 101. *Chlorophyll cw* (Chl *cw*)
 102. *Chlorophyll cx* (Chl *cx*)
 103. *Chlorophyll cy* (Chl *cy*)
 104. *Chlorophyll cz* (Chl *cz*)
 105. *Chlorophyll da* (Chl *da*)
 106. *Chlorophyll db* (Chl *db*)
 107. *Chlorophyll dc* (Chl *dc*)
 108. *Chlorophyll dd* (Chl *dd*)
 109. *Chlorophyll de* (Chl *de*)
 110. *Chlorophyll df* (Chl *df*)
 111. *Chlorophyll dg* (Chl *dg*)
 112. *Chlorophyll dh* (Chl *dh*)
 113. *Chlorophyll di* (Chl *di*)
 114. *Chlorophyll dj* (Chl *dj*)
 115. *Chlorophyll dk* (Chl *dk*)
 116. *Chlorophyll dl* (Chl *dl*)
 117. *Chlorophyll dm* (Chl *dm*)
 118. *Chlorophyll dn* (Chl *dn*)
 119. *Chlorophyll do* (Chl *do*)
 120. *Chlorophyll dp* (Chl *dp*)
 121. *Chlorophyll dq* (Chl *dq*)
 122. *Chlorophyll dr* (Chl *dr*)
 123. *Chlorophyll ds* (Chl *ds*)
 124. *Chlorophyll dt* (Chl *dt*)
 125. *Chlorophyll du* (Chl *du*)
 126. *Chlorophyll dv* (Chl *dv*)
 127. *Chlorophyll dw* (Chl *dw*)
 128. *Chlorophyll dx* (Chl *dx*)
 129. *Chlorophyll dy* (Chl *dy*)
 130. *Chlorophyll dz* (Chl *dz*)
 131. *Chlorophyll ea* (Chl *ea*)
 132. *Chlorophyll eb* (Chl *eb*)
 133. *Chlorophyll ec* (Chl *ec*)
 134. *Chlorophyll ed* (Chl *ed*)
 135. *Chlorophyll ee* (Chl *ee*)
 136. *Chlorophyll ef* (Chl *ef*)
 1

<223> Description of Artificial Sequence: Synthetic
Primer

acggttgccc atcttatcag tg

22

<211> 22

<212> DNA

<213> Artificial Sequence

<223> Description of Artificial Sequence: Synthetic
Primer

tctcgttctg atggctcctg tg

22

<211> 23

<212> DNA

<213> Artificial Sequence

<223> Description of Artificial Sequence: Synthetic
Primer

gtgtaaccgg tgatactctc gcc

23

<211> 20

<212> DNA

<213> Artificial Sequence

<223> Description of Artificial Sequence: Synthetic
Primer

cgacgaagca gtggaggaac

20

<211> 22

<212> DNA

<213> Artificial Sequence

<223> Description of Artificial Sequence: Synthetic
Primer

gcgagaaaac gtgaagagat ag

22

<211> 22

<212> DNA

<213> Artificial Sequence

<220>		
<223>	Description of Artificial Sequence:	Synthetic Primer
<400>	166	
	agctactacc cgaatgtgaa tc	22
<210>	167	
<211>	21	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence:	Synthetic Primer
<400>	167	
	ttggtgtggtt aagaagagtg g	21
<210>	168	
<211>	20	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence:	Synthetic Primer
<400>	168	
	taggacgcaa atcagagaag	20
<210>	169	
<211>	24	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence:	Synthetic Primer
<400>	169	
	ctaatacatgt gtctttaggc tadc	24
<210>	170	
<211>	18	
<212>	DNA	
<213>	Artificial Sequence	
<220>		
<223>	Description of Artificial Sequence:	Synthetic Primer
<400>	170	
	ttgggctggc gtggaatc	18
<210>	171	
<211>	18	
<212>	DNA	
<213>	Artificial Sequence	

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 171
 agggcagaaa gcgtcagg 18

<210> 172
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 172
 gctgcgaagg ctgaatgaag 20

<210> 173
 <211> 20
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 173
 tcgccgggaa aaacagtaac 20

<210> 174
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 174
 caccgacgtt atctgggaaa g 21

<210> 175
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 Primer

<400> 175
 aaaagttagg tagtaggaaa gaaagaag 28

<210> 176
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>

